

## CONTENTS

<i>Publisher's note</i> .....	v
<i>Professor Clinton Edward Ballou</i> .....	vii
Synthesis of dispirodioxanyl pseudo-oligosaccharides by selective protonic activation of isomeric glycosylfructoses in anhydrous hydrogen fluoride J. Defaye and J.M. García Fernández (Grenoble, France) .....	1
Protonic reactivity of sucrose in anhydrous hydrogen fluoride J. Defaye and J.M. García Fernández (Grenoble, France) .....	17
Recognition of synthetic <i>O</i> -methyl, epimeric, and amino analogues of the acceptor $\alpha$ -L-Fucp-(1 $\rightarrow$ 2)- $\beta$ -D-Galp-OR by the blood-group A and B gene-specified glycosyltransferases T.L. Lowary and O. Hindsgaul (Edmonton, AB, Canada) .....	33
Synthesis of allyl 3-deoxy- and 4-deoxy- $\beta$ -D-galactopyranoside and simultaneous preparations of Gal(1 $\rightarrow$ 2)- and Gal(1 $\rightarrow$ 3)-linked disaccharide glycosides R.T. Lee and Y.C. Lee (Baltimore, MD, USA) .....	69
Structural features and hypoglycemic activities of two polysaccharides from a hot-water extract of <i>Agrocybe cylindracea</i> T. Kiho, S. Sobue and S. Ukai (Gifu, Japan) .....	81
A 1,2- $\alpha$ -D-mannosidase from a <i>Bacillus</i> sp.: purification, characterization, and mode of action Y. Maruyama, T. Nakajima and E. Ichishima (Sendai-shi, Japan) .....	89
New pyruvylated, glycosylated acyltrehaloses from <i>Mycobacterium smegmatis</i> strains, and their implications for phage resistance in mycobacteria G.S. Besra (Fort Collins, CO, USA), K.-H. Khoo, J.T. Belisle (London, UK), M.R. McNeil (Fort Collins, CO, USA), H.R. Morris, A. Dell (London, UK) and P.J. Brennan (Fort Collins, CO, USA) .....	99
An improved procedure for the analysis of linkage positions in 2-acetamido-2-deoxy-D-glucopyranosyl residues by the reductive-cleavage method A.J. D'Ambra and G.R. Gray (Minneapolis, MN, USA) .....	115
Analysis by the reductive-cleavage method of a polysaccharide containing 2-acetamido-2,6-dideoxy-D- and -L-galactopyranosyl residues A.J. D'Ambra and G.R. Gray (Minneapolis, MN, USA) .....	127
Structural studies of endopolygalacturonase-resistant fragments of an antiulcer pectin from the roots of <i>Bupleurum falcatum</i> L. M. Hirano, H. Kiyohara, T. Matsumoto and H. Yamada (Tokyo, Japan) .....	145
Specificity studies of the GDP-[L]-fucose: 2-acetamido-2-deoxy- $\beta$ -[D]-glucoside (Fuc $\rightarrow$ Asn-linked GlcNAc) 6- $\alpha$ -[L]-fucosyltransferase from rat-liver Golgi membranes M.-C. Shao, C.W. Sokolik and F. Wold (Houston, TX, USA) .....	163

Glycamine formation via reductive amination of oligosaccharides with benzylamine: efficient coupling of oligosaccharides to protein T. Yoshida and Y.C. Lee (Baltimore, MD, USA) .....	175
<i>Regular papers</i>	
Separation and quantitative determination of nanogram quantities of maltodextrins and isomaltodextrins by thin-layer chromatography J.F. Robyt and R. Mukerjea (Ames, IA, USA) .....	187
The crystal and molecular structure of the trisaccharide erlose trihydrate T. Taga, E. Inagaki, Y. Fujimori (Kyoto, Japan) and S. Nakamura (Okayama, Japan) . . . .	203
Synthesis of methyl <i>O</i> - $\alpha$ -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- $\alpha$ -D-galactopyranosides specifically deoxygenated at position 3, 4, or 6 of the galactose residue L.A. Mulard, P. Kováč and C.P.J. Glaudemans (Bethesda, MD, USA) .....	213
Studies of the stereoselective reduction of 2-hydroxyimino-hexopyranosides: LiBH <sub>4</sub> -Me <sub>3</sub> SiCl, a mild reducing agent of oximes to amines A. Banaszek and W. Karpiesiuk (Kasprzaka, Poland) .....	233
Synthesis of 1,2-anhydro-3,4,5-tri- <i>O</i> -benzyl- $\beta$ -D-fructopyranose M.M. Campbell, G.D. Heffernan (Bath, UK) and T. Lewis (Berks, UK) .....	243
New acyclic analogues of lipid A: synthesis of 4-phosphonoxybutyl and 3-phosphonoxypropyl glycosides of 2-amino-2-deoxy-D-glucose J. Eustache, A. Grob and H. Retscher (Wien, Austria) .....	251
Synthesis of <i>O</i> -[2-acetamido-2-deoxy-6- <i>O</i> -stearoyl- and -6- <i>O</i> -(2-tetradecylhexadecanoyl)- $\beta$ -D-glucopyranosyl]-(1 $\rightarrow$ 4)- <i>N</i> -acetylnormuramoyl-L- $\alpha$ -aminobutanoyl-D-isoglutamine, lipophilic disaccharide analogues of MDP M. Ledvina, J. Ježek, D. Šaman, T. Vaisar and V. Hříbalová (Prague, Czechoslovakia) . . .	269
Chemical and enzymatic synthesis of multivalent sialoglycopeptides C. Unverzagt (Los Angeles, CA, USA; Garching, Germany), S. Kelm (Los Angeles, CA, USA; Kiel, Germany) and J.C. Paulson (Los Angeles, La Jolla, CA, USA) .....	285
Structure and physical properties of the extracellular polysaccharide PS-P4 produced by <i>Sphingomonas paucimobilis</i> P4 (DSM 6418) D. Lobas, M. Nimtz, V. Wray, A. Schumpe, C. Proppe and W.-D. Deckwer (Braunschweig, Germany) .....	303
Structural studies of fungal cell-wall polysaccharides from two strains of <i>Talaromyces flavus</i> E. Parra, J. Jiménez-Barbero, M. Bernabé, J.A. Leal, A. Prieto and B. Gómez-Miranda (Madrid, Spain) .....	315
<i>Note</i>	
The structure of a core oligosaccharide component from <i>Hafnia alvei</i> strain 32 and 1192 lipopolysaccharides W. Jachymek, C. Lugowski, E. Romanowska, D. Witkowska (Wroclaw, Poland), C. Petersson and L. Kenne (Uppsala, Sweden) .....	327
<i>Author index</i> .....	C1
<i>Subject index</i> .....	C3
<i>Contents</i> .....	C7

